

SECTION 4

SYSTEM SUPPLIES

4.1 WATER SOURCES

Requirement

#13. Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a) (10631(b)).

The Montebello Land and Water Company (ML&WC) obtains its groundwater supply, extracted through seven (7) wells, from the Central Basin. In the last twelve (12) years, ML&WC has pumped an average of 3,732 AFY of groundwater, which has been sufficient to meet the service area's average demand of 3,662 AFY. In the future, ML&WC plans to continue extracting groundwater from Central Basin. Since ML&WC's wells are located at the north end of Central Basin, near the spreading grounds, there have not been any regular or frequent supply deficiencies within the service area. Table 4-1 (DWR Table 16) summarizes ML&WC current and projected water supply.

Table 4-1 (DWR Table 16)							
Water supplies — current and projected							
Water Supply Sources		2010	2015	2020	2025	2030	2035 - opt
Water purchased from ¹ :	Wholesaler supplied volume (yes/no)						
Wholesaler 1 (enter agency name)							
Wholesaler 2 (enter agency name)							
Wholesaler 3 (enter agency name)							
Supplier-produced groundwater ²		3,373	3,612	3,646	3,679	3,703	3,746
Supplier-produced surface water							
Transfers in							
Exchanges In							
Recycled Water		0	18.5	18.5	18.5	18.5	18.5
Desalinated Water							
Other							
Other							
Total		3,373	3,631	3,664	3,698	3,722	3,765
Units (circle one): <u>acre-feet per year</u> million gallons per year cubic feet per year							
¹ Volumes shown here should be what was purchased in 2010 and what is anticipated to be purchased in the future. If these numbers differ from what is contracted, show the contracted quantities in Table 17.							
² Volumes shown here should be consistent with Tables 17 and 18.							

Imported Water

ML&WC currently does not have a connection to an imported water supply facility, and therefore does not purchase imported water, and there are no plans to import water in the future as the groundwater supply is

deemed sufficient and reliable to meet demands. Additionally, ML&WC does not have any connections to an imported water supply facility.

Table 4-2 (DWR Table 17) shows ML&WC's future imported supplies.

Table 4-2 (DWR Table 17) Wholesale supplies — existing and planned sources of water						
Wholesale sources ^{1,2}	Contracted Volume ³	2015	2020	2025	2030	2035 - opt
N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Units (circle one): acre-feet per year million gallons per year cubic feet per year</i> ¹ Water volumes presented here should be accounted for in Table 16. ² If the water supplier is a wholesaler, indicate all customers (excluding individual retail customers) to which water is sold. If the water supplier is a retailer, indicate each wholesale supplier, if more than one. ³ Indicate the full amount of water						

4.2 GROUNDWATER

Requirement

#4. (Is) groundwater . . . identified as an existing or planned source of water available to the supplier . . . (10631(b))?

Extraction of Groundwater and Allowed Pumping Allocation

The Central Basin is ML&WC's source of groundwater. Groundwater available to ML&WC is a combination of the Allowed Pumping Allocation (APA) and leases from the other members of the Central Basin Water Association (CBWA). ML&WC's APA of 1,624 AFY. The difference between the total demand and APA is supplemented by leases from others with rights in the Central Basin. ML&WC has seven (7) active wells, which have sufficient capacity to deliver the demand.

The location of ML&WC's groundwater wells is illustrated on Figure 4-1.

Leases and Sales of Water Rights

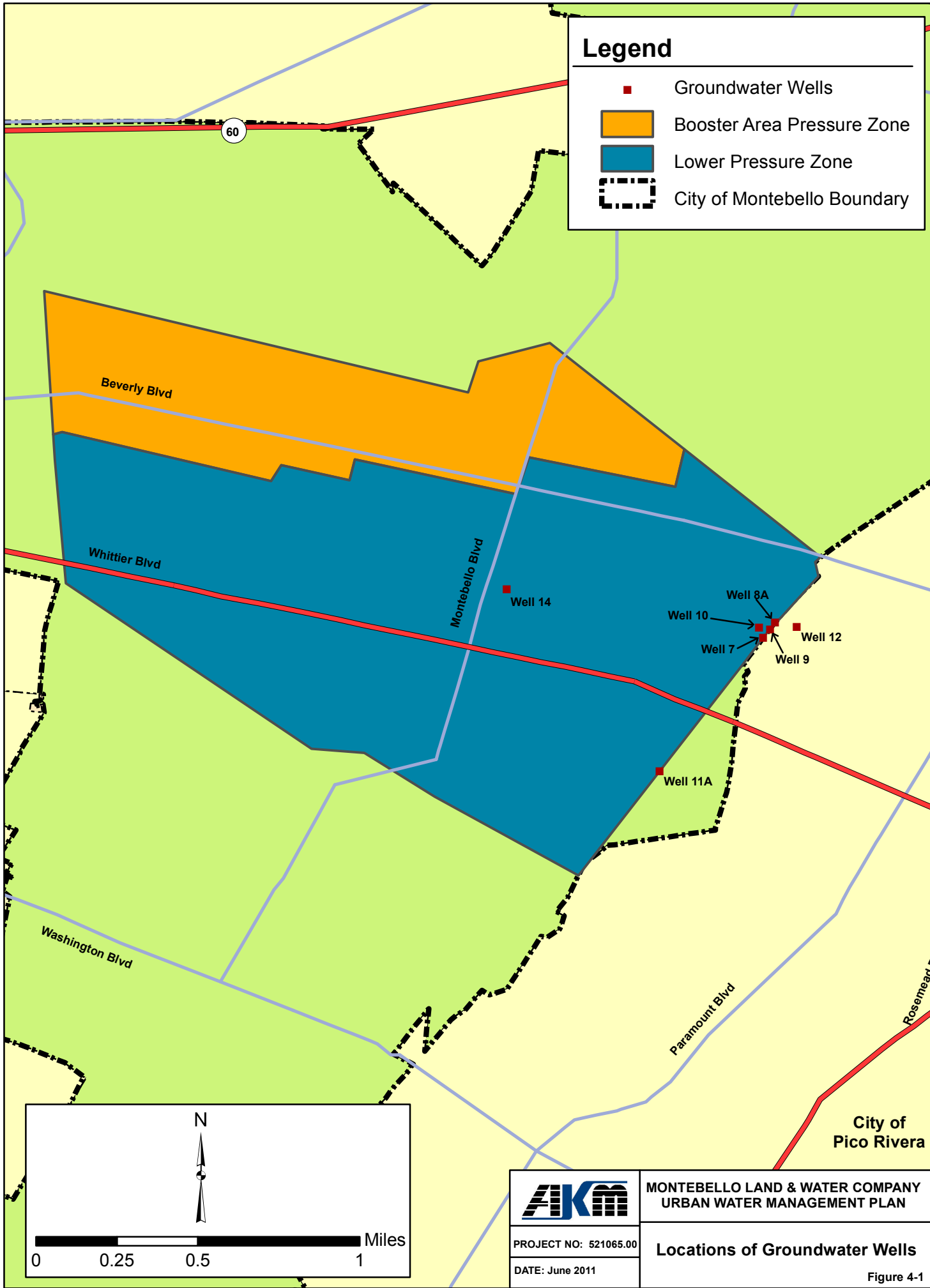
Water rights can be leased or sold among the parties within Central Basin. This enables parties to increase their supply without having to use the Exchange Pool, and at the same time not waste the surplus water capacity of the other parties. All forms regarding leases and sales of water rights can be found on <http://www.water.ca.gov/watermaster>. ML&WC plans on purchasing additional water rights when they become available.

Overextraction of Groundwater

In addition to the established water rights, the Central Basin Judgment (Judgment) permits water extractors to pump out more groundwater than the APA, on the condition that the extra amount is not more than 20% of the original APA (324.8 AFY for ML&WC) or 20 acre-feet, whichever is greater. Overextractions above the set limit must first be approved by the Watermaster.

Exchange Pool and Carryover

The Watermaster can also open the Exchange Pool, which provides additional water rights to parties that do not have other sources of supply in addition to groundwater. Additional water rights, either a Category A (a



	MONTEBELLO LAND & WATER COMPANY URBAN WATER MANAGEMENT PLAN
	Locations of Groundwater Wells
	Figure 4-1

PROJECT NO: 521065.00 DATE: June 2011

maximum of 150% of the party's APA (2,136 AF for ML&WC) or 100 acre-feet, whichever is greater) or a Category B (greater than 150% of the party's APA (2,136 acre-feet for ML&WC) or 100 acre-feet, whichever is greater), through the Exchange Pool may only be requested if the estimated demands exceed the combined APA and leases.

The additional water pumped through the Exchange Pool is supplemented by either Voluntary Subscription or Required Subscription offered by the other parties. A Voluntary Subscription allows any party to participate in the pool as long as its estimated demands are less than the projected supplies, and only the surplus supply may be offered. If the needs of the Exchange Pool are not met through Voluntary Subscriptions, parties that can purchase imported water from either the Metropolitan Water District (MWD) or Central Basin Municipal Water District (CBMWD) will be mandated to participate in Required Subscriptions. Required Subscriptions are limited to 20% of the participating party's APA, and the party's combined water needs and Required Subscription is less than its total supplies.

The cost of the Exchange Pool water is calculated based on the weighted daily normal price charged by CBMWD for treated MWD water used by the exchangers; the incremental cost of pumping water in the basin, which is determined by multiplying Southern California Edison Company's schedule PA-1 rate by 560 kilowatt-hours per acre-foot; and the cost of the current replenishment assessment.

Any water that is purchased through the Exchange Pool but is not pumped is carried over onto the following fiscal year.

ML&WC is eligible to tap into the Exchange Pool in case there is a drastic increase in demand since its potable water supply mix only consists of groundwater.

Requirement

#15. (Provide a) copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management (10631(b)(1)).

Watermaster

The California Department of Water Resources (DWR) is the appointed Watermaster to oversee the management of Central Basin and to enforce the provisions of the Judgment. The Watermaster's primary powers and responsibilities include the following:

- Require reports, information, and records from the parties
- Require all parties to install and maintain measuring devices used in extracting groundwater
- Inspect facilities that produce groundwater for compliance
- Prepare an annual report that reviews the following issues:
 - Groundwater extractions
 - Exchange Pool operations
 - Use of imported water
 - Violations of the Judgments and the corrective actions taken
 - Change of ownership of total water rights
 - Costs of Watermaster administration
 - Other recommendations that will provide for better management of the basin
- Prepare an annual budget
- Adopt and amend rules that will be beneficial to the enforcement of the Judgment and management of the basin

The Watermaster publishes an annual report that summarizes the status and management of the Basin. It discusses water conditions, water use, and operations. More specifically, updates on replenishment operations, status of the groundwater wells, the Alamitos Barrier Project, water quality, Exchange Pool, sales and leases of water rights, overextractions, water use, the Long Beach Conjunctive Use Program, imported

and exported water, recycled water, budget, groundwater clean-up, and the Meter Testing Program are included in the report.

As one of the parties benefitting from Central Basin, ML&WC complies with the regulations imposed by the Watermaster. A copy of the 2009-2010 Watermaster Service in the Central Basin Report is attached as Appendix B.

Additionally, the Water Replenishment District of Southern California (WRD) is the agency responsible for the replenishment of the Central Basin. WRD manages the Basin through the Regional Groundwater Monitoring Program, which is composed of approximately 200 WRD and USGS-installed monitoring wells throughout the Basin. The collected data from these monitoring wells are stored in a GIS database and analyzed to provide a better understanding of the condition of the Basin. This information is available in WRD's annual Regional Groundwater Monitoring Report. A copy of this report for the water year 2009-2010 is in Appendix C.

Requirement

#16. (Provide a) description of any groundwater basin or basins from which the urban water supplier pumps groundwater (10631(b)(2)).

ML&WC extracts groundwater from the Central Basin, which is one of the largest groundwater basins in Southern California, encompassing 24 incorporated cities with a total area of 277 square miles. Approximately 227 square miles lies within the service area of CBMWD, which includes the service area of ML&WC. It is bounded by the Newport-Inglewood Uplift on the southwest, the Los Angeles-Orange County Line on the southeast, and to the north are the boundary between the City of Los Angeles and the unincorporated area of East Los Angeles, and the foothills of Merced and Puente Hills. Central Basin is located in the southeastern portion of the Los Angeles County Coastal Plain. The allowed pumping allocation for Central Basin is 217,367 acre-feet of water each year.

Groundwater quality in the Central Basin is generally very good; however, there remain threats of contamination from adjacent basins, seawater intrusion, and migration of shallow contaminants into the deeper aquifers. Contaminants from the San Gabriel Valley aquifer are mitigated through the Central Basin Water Quality Protection Project (WQPP). Moreover, seawater intrusion is prevented by the Alamitos Barrier, located at the southwestern portion of the Central Basin.

Water Quality Protection Project

The contaminants in the San Gabriel Valley groundwater supply began to slowly seep into Central Basin through the Whittier Narrows in the 1980s. This prompted CBMWD to initiate the WQPP. Two wells in northern Pico Rivera are used to pump out the contaminated groundwater, which is then directed to the granular-activated carbon treatment facility located at the City of Whittier's Pumping Plant No.2 in Pico Rivera. Finally, the treated water is delivered to customers in the Cities of Pico Rivera, Santa Fe Springs, and Whittier (Reference: CBMWD, 2010).

Alamitos Barrier

To preserve the quality of groundwater in Central Basin and prevent seawater intrusion into the basin, the Alamitos Barrier was constructed in 1964. The Alamitos Barrier is located in the southwest section of Central Basin, near the Los Angeles-Orange County line. It is composed of a supply pipeline, injection wells, extraction wells, and observation wells. The injection wells are used to form a freshwater pressure ridge, and the extraction wells are intended to break the landward gradient of seawater. The injected water is a blend of imported water and reclaimed water. The imported water is purchased from MWD. The recycled water is from the Advanced Water Treatment Facility, which is operated by the Long Beach Water Department. Both imported and recycled water are purchased by the Water Replenishment District of Southern California (WRD). The water surface elevations and depth specific chloride levels are monitored through the observation wells. The Alamitos Barrier is operated and maintained by the County of Los Angeles Public Works (Reference: County of Los Angeles Public Works, 2010).

Requirement

#17. For those basins for which a court or the board has adjudicated the rights to pump groundwater, (provide) a copy of the order or decree adopted by the court or the board (10631(b)(2)).

The Central Basin Judgment (Judgment) was entered by the California State Superior Court for the County of Los Angeles on May 17, 1965. The Judgment adjudicated water rights in the Central Basin and appointed the DWR as Watermaster, who is responsible to account for and implement the management of the basin.

The Judgment has been amended several times since 1965. In 1980, it was amended to facilitate the conversion of a water year (October 1st to September 30th) to a fiscal year (July 1st to June 30th). The amendment in 1985 modified the annual budget. The Judgment was again amended in 1991 to update the carryover and overproduction provisions, define drought carryover, and provide exemptions to extractors who pump contaminated groundwater.

A copy of the 1965 Central Basin Judgment is included in Appendix D.

Requirement

#18. (Provide) a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree (10631(b)(2)).

Central Basin Judgment

The Judgment established the Allowable Pumping Allocation (APA) from Central Basin at 217,367 acre-feet per year, which is shared among the different parties within the basin. The Judgment also allows unused water rights to be carried over onto the following fiscal year at a maximum of 20 percent of the water supplier's APA or 20 AFY, whichever is greater. In addition, parties are permitted to extract additional groundwater, the greater of 120% of their APA or 20 AFY. Greater amounts may be overextracted, but they will have to be approved by the Watermaster. All overextractions must be made up in the following fiscal year, unless such requirement would cause hardship on the Party. The Judgment also authorizes an Exchange Pool, specifically designed for parties, such as ML&WC, whose only source of potable water supply is Central Basin.

ML&WC's APA is 1,624 AFY. Additional demand is met through leases. The leased amounts may vary from year to year. In 2010, ML&WC leased a net total of 1,696 acre-feet of groundwater from California Water Service Company, City of Downey, Lunday-Thagardi Oil Company, Orchard Dale Water District, Paramount Unified School District, and Whittier Union High School District. The total allowable carryover onto fiscal year 2010-2011 is 616 acre-feet.

Requirement

#19. For basins that have not been adjudicated, (provide) information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition (10631(b)(2)).

As previously stated, Central Basin is ML&WC's only source of groundwater. It was adjudicated in 1965 per the Central Basin Judgment. Amendments were made in 1980, 1985, and 1991.

4.3 GROUNDWATER SUPPLIES DURING THE PAST FIVE YEARS**Requirement**

#20. (Provide a) detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records (10631(b)(3)).

ML&WC has no ability to import water, and Central Basin is currently its only source of potable water. As shown in Table 3-1, groundwater production has been in steady decline since 1999, with the exception of 2005 and 2006. The average volume of extracted groundwater from the 1999 to 2010 period was 3,732 AFY. For the years 2006 to 2010, the average was down to 3,558 AFY. The decrease in water production is consistent with the declining demand.

Due to ML&WC's strategic location at the north end of the Central Basin near the spreading grounds, supply deficiencies have not been a problem for ML&WC.

Currently, there are no indications of immediate threats to ML&WC's groundwater supply since methods, such as WQPP and the Alamitos Barrier, are already in place to mitigate issues of contaminants and seawater intrusion. The existing wells are adequate to meet ML&WC's potable water demands. No additional development is planned in the future as the service area is already built out. Therefore, no significant increase in water demand is anticipated.

Table 4-3 (DWR Table 18) displays the amount of groundwater pumped since 2006.

Table 4-3 (DWR Table 18) Groundwater — volume pumped						
Basin name(s)	Metered or Unmetered ¹	2006	2007	2008	2009	2010
Central Basin	Metered	3,544	3,686	3,648	3,538	3,373
Total groundwater pumped		3,544	3,686	3,648	3,538	3,373
Groundwater as a percent of total water supply		100%	100%	100%	100%	100%
Units (circle one): <u>acre-feet per year</u> million gallons per year cubic feet per year						
¹ Indicate whether volume is based on volumetric meter data or another method						

4.4 FUTURE GROUNDWATER SUPPLY

Requirement

#21. (Provide a) detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records (10631(b)(4)).

As previously mentioned, ML&WC's service area is already built out, and no land is available for future development. Consequently, no significant increase in water demand is anticipated, and the future groundwater supply can be provided through ML&WC's APA and leases, as outlined in the Judgment. Historically, this volume of groundwater is sufficient to meet demands, and surpluses have been available in the recent years. ML&WC will pursue purchasing additional water rights in the future.

Table 4-4 (DWR Table 19) presents the estimates of ML&WC's future groundwater supply.

Table 4-4 (DWR Table 19) Groundwater — volume projected to be pumped					
Basin name(s)	2015	2020	2025	2030	2035 - opt
Central Basin (APA)	1,624	1,624	1,624	1,624	1,624
Central Basin (Leases)	1,988	2,022	2,055	2,079	2,122
Total groundwater pumped	3,612	3,646	3,679	3,703	3,746
Percent of total water supply	99.49%	99.50%	99.50%	99.50%	99.51%
Units (circle one): <u>acre-feet per year</u> million gallons per year cubic feet per year					
Include future planned expansion					

4.5 TRANSFER OPPORTUNITIES

Requirement

#24. Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (10631(d)).

While the Judgment allows leases of APA among member agencies in the Central Basin, including ML&WC, no new transfers and exchanges of water, either on a short-term or long-term basis, are presently proposed.

Table 4-5 (DWR Table 20) shows future transfer and exchange opportunities.

Table 4-5 (DWR Table 20) Transfer and exchange opportunities			
Transfer agency	Transfer or exchange	Short term or long term	Proposed Volume
N/A	N/A	N/A	N/A
Total			
Units (circle one): <u>acre-feet per year</u> million gallons per year cubic feet per year			

4.6 DESALINATED WATER OPPORTUNITIES

Requirement

#31. Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply (10631(i)).

No developments for desalinated water are presently proposed. ML&WC's service area, as well as the entire Central Basin, are landlocked and have no direct access to ocean water for desalination.

4.7 RECYCLED WATER OPPORTUNITIES

Requirement

#44. Provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area (10633).

Recycled water is currently not being used within the service area of ML&WC. However, the future completion

of CBMWD's Southeast Water Reliability Project (SWRP) Phase 1 will supply recycled water to Henry Acuna Park, which is located within ML&WC's service area. The estimated recycled water demand at this location is 18.5 AFY.

Henry Acuna Park is approximately three (3) acres in size and uses an average of 19.1 AFY of water. It is served from the Booster Area Pressure Zone through a 3-inch meter. Approximately 18.5 AFY of the total demand is used for irrigation.

4.8 WASTEWATER COLLECTION AND TREATMENT SYSTEM

Requirement

#45. (Describe) the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal (10633(a)).

Raw sewage from the service area is collected by sewer trunks owned and operated by the County Sanitation Districts of Los Angeles County (CSDLAC). CBMWD then purchases approximately 55 MGD of the tertiary-treated recycled water from the San Jose Creek Water Recycling Plant (San Jose Creek) and Los Coyotes Water Recycling Plant (Los Coyotes), which are both operated by CSDLAC.

The San Jose Creek has a treatment capacity of 100 MGD. Approximately 71 MGD is recycled and reused at 17 various locations in the County of Los Angeles (County), including the Montebello Spreading Grounds and other areas that require irrigation. The treated effluent from San Jose Creek meets water quality guidelines set forth by the National Pollution Discharge Elimination System (NPDES), including chloride levels below 180 mg/L and daily maximum final effluent turbidity of 3.4 NTU. After disinfection and dechlorination, the remaining effluent, not distributed as recycled water, is discharged to the San Gabriel River for groundwater recharge.

The Los Coyotes has a capacity to treat 37 MGD of wastewater and distributes approximately 27 MGD of the recycled water to various locations that require irrigation and industrial uses, such as carpet dying and concrete mixing. To ensure the high quality of treated water that is delivered to recycled water customers, CSDLAC operates testing laboratories at its plants, including the San Jose Creek Water Quality Lab and Treatment Plant Laboratories.

The treatment process at both San Jose Creek and Los Coyotes begins with the collection of wastewater from CSDLAC's sewer trunk system. Following secondary treatment, the treated water is coagulated, flocculated, filtrated, and disinfected to complete the tertiary treatment process. The effluent meets all requirements of the California Code of Regulations Title 22. CSDLAC has previously determined that expansion of these two plants will not be necessary, despite the expected increase in population, because the service area is built out.

From the San Jose Creek and Los Coyotes plants, CBMWD distributes recycled water to its customers through the E. Thornton Ibbetson Century Water Recycling Project (Ibbetson Project) and the Esteban E. Torres Rio Hondo Water Recycling Project (Torres Project). Currently, the Ibbetson Project and the Torres Project deliver recycled water to customers in the Cities of Bellflower, Bell, Bell Gardens, Commerce, Compton, Cudahy, Downey, Huntington Park, Lakewood, Lynwood, Norwalk, Paramount, Pico Rivera Santa Fe Springs, South Gate, and Whittier (Reference: CBMWD UWMP 2005).

Upon completion of the SWRP Phase 1, which will link the Ibbetson and Torres Projects, CBMWD's recycled water distribution will increase in portions of the City Pico Rivera and the northern section of the City of Montebello, which will encompass the service area of ML&WC. ML&WC is expected to receive approximately 18.5 AFY of recycled water from SWRP Phase 1.

Table 4-6 (DWR Table 21) lists the amount of wastewater that is collected and treated at Los Coyotes and San Jose Creek and the volume that meets the recycled water standard, as reported in CBMWD's 2010

UWMP. The raw sewage is collected from CSDLAC's service area.

Table 4-6 (DWR Table 21)							
Recycled water — wastewater collection and treatment							
Type of Wastewater	2005	2010	2015	2020	2025	2030	2035 - opt
Wastewater collected & treated in service area			110,000	135,000	145,000	154,000	154,000
Volume that meets recycled water standard			110,000	135,000	145,000	154,000	154,000
Units (circle one): <u>acre-feet per year</u> million gallons per year cubic feet per year							

4.9 TREATED WASTEWATER THAT MEETS RECYCLED WATER STANDARDS

Requirement

#46. (Describe) the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project (10633(b)).

As previously mentioned, not all the wastewater that goes through the recycling plants are reused. Only about one-third is delivered to recycled water customers. The rest of the unused treated water, following disinfection and dechlorination, is discharged to the San Gabriel River, to other major flood control channels, and finally to the ocean.

The delivery of recycled water to potential customers is primarily limited by the lack of infrastructure. However, with the future completion of SWRP, recycled water use will definitely increase since more customers will be connected to CBMWD's recycled water distribution system.

Table 4-7 (DWR Table 22) shows the amount of treated wastewater that is not used as recycled water, from CSDLAC, as quantified in CBMWD's 2010 UWMP.

Table 4-7 (DWR Table 22)							
Recycled water — non-recycled wastewater disposal							
Method of disposal	Treatment Level	2010	2015	2020	2025	2030	2035 - opt
Discharged to San Gabriel River	Tertiary Level		77,850	79,600	78,350	82,100	82,100
Total			77,850	79,600	78,350	82,100	82,100
Units (circle one): <u>acre-feet per year</u> million gallons per year cubic feet per year							

4.10 EXISTING RECYCLED WATER USE

Requirement

#47. (Describe) the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use (10633(c)).

Recycled water is currently unavailable at ML&WC's service area due to the lack of infrastructure for deliveries.

4.11 POTENTIAL RECYCLED WATER USES

Requirement

#48. (Describe and quantify) the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses (10633(d)).

The SWRP Phase 1 intends to expand CBMWD's recycled water service to several locations in the Cities of Pico Rivera and Montebello via a 30-inch main line. Upon completion, the recycled water from this proposed pipeline will be utilized for groundwater recharge at the San Gabriel and Rio Hondo Spreading Grounds and for landscape irrigation.

One of ML&WC's customers has been identified as a potential customer that will utilize the recycled water for irrigation purposes. The estimated recycled water demand at Henry Acuna Park is 18.5 AFY. There are no other potential recycled water customers that have been identified within ML&WC's service area.

Potential recycled water use in the future is shown in Table 4-8 (DWR Table 23).

Table 4-8 (DWR Table 23) Recycled water — potential future use							
User type	Description	Feasibility ¹	2015	2020	2025	2030	2035 - opt
Agricultural irrigation							
Landscape irrigation ²	Henry Acuna Park		18.5	18.5	18.5	18.5	18.5
Commercial irrigation ³							
Golf course irrigation							
Wildlife habitat							
Wetlands							
Industrial reuse							
Groundwater recharge							
Seawater barrier							
Geothermal/Energy							
Indirect potable reuse							
Other (user type)							
Other (user type)							
Total			18.5	18.5	18.5	18.5	18.5

Units (circle one): acre-feet per year million gallons per year cubic feet per year

¹ Technical and economic feasibility.

² Includes parks, schools, cemeteries, churches, residential, or other public facilities)

³ Includes commercial building use such as landscaping, toilets, HVAC, etc) and commercial uses (car washes, laundries, nurseries, etc)

Requirement

#49. (Describe) the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision (10633(e)).

The discussion of recycled water and its potential uses were not included in ML&WC's 2005 Urban Water Management Plan (UWMP). At that time, no plans of constructing a recycled water pipeline through the service area were finalized, and the potential customers had not been identified. As recently as early 2011, recycled water remains excluded from ML&WC's water supply mix.

Table 4-9 (DWR Table 24) compares the 2010 recycled water use projected in the 2005 UWMP and the actual use in 2010.

Table 4-9 (DWR Table 24) Recycled water — 2005 UWMP use projection compared to 2010 actual		
Use type	2010 actual use	2005 Projection for 2010 ¹
Agricultural irrigation	0	0
Landscape irrigation ²	0	0
Commercial irrigation ³	0	0
Golf course irrigation	0	0
Wildlife habitat	0	0
Wetlands	0	0
Industrial reuse	0	0
Groundwater recharge	0	0
Seawater barrier	0	0
Geothermal/Energy	0	0
Indirect potable reuse	0	0
Other (user type)		
Other (user type)		
Total	0	0
Units (circle one): acre-feet per year million gallons per year cubic feet per year		
¹ From the 2005 UWMP. There has been some modification of use types. Data from the 2005 UWMP can be left in the		
² Includes parks, schools, cemeteries, churches, residential, or other public facilities)		
³ Includes commercial building use such as landscaping, toilets, HVAC, etc) and commercial uses (car washes, laundries,		

4.12 ACTIONS AND INCENTIVES TO ENCOURAGE RECYCLED WATER USE

Requirement

#50. (Describe the) actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year (10633(f)).

In an effort to encourage an increase in recycled water usage, CBMWD markets recycled water not only as a water conservation tool but also as a less expensive, more reliable alternative to potable water. CBMWD's marketing efforts may not be quantifiable, but the recent years have shown a consistent increase in recycled water demand throughout CBMWD's service area. Current customers include golf courses, parks, and commercial and industrial users.

One incentive that CBMWD offers is the lower rates for recycled water compared to the rates charged for potable water. However, since ML&WC does not have imported potable water, this incentive is not fully realized by ML&WC customers that may convert to recycled water. Central Basin Municipal Water District offers loans to customers, who would like to convert to recycled water but lack the funds to do so. The loan is used for plumbing retrofit expenses and is reimbursed through future water bills up to ten (10) years. The

amortization rate of the loan is between the potable and recycled water rates, so that the total month-to-month recycled water bill will not be greater than the potable water rate. Once the loan is paid, the customer will be billed at the current recycled water rate. Again, since the ML&WC customers do not purchase potable imported water, this benefit may not be realized.

Table 4-10 (DWR Table 25) quantifies the results of the incentives that encourage recycled water use.

Table 4-10 (DWR Table 25) Methods to encourage recycled water use						
Actions	Projected Results					
	2010	2015	2020	2025	2030	2035 - opt
Financial incentives						
Loans for Plumbing Retrofits	0	18.5	18.5	18.5	18.5	18.5
name of action						
Total	0	18.5	18.5	18.5	18.5	18.5
Units (circle one): <u>acre-feet per year</u> million gallons per year cubic feet per year						

Note that projected results are unavailable in 2010 since no recycled water was delivered to Henry Acuna Park during that time, prior to the completion of SWRP Phase 1.

4.13 PLAN FOR OPTIMIZING THE USE OF RECYCLED WATER

Requirement

#51. (Provide a) plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use (10633(g)).

ML&WC plans to optimize the use of recycled water within its service area by discontinuing deliveries of potable water to Henry Acuna Park for irrigation purposes. When SWRP Phase 1 becomes operational, the park will exclusively obtain water for irrigation from CBMWD.

It is not economically feasible for ML&WC to develop its own recycled water system due to its small size and the lack of additional potential customers within its service area. Consequently, it relies on CBMWD to supply its recycled water needs and expand the recycled water system if deemed feasible.

4.14 FUTURE WATER PROJECTS

Requirement

#30. (Describe) all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program (10631(h)).

Since ML&WC's service area lacks available land that is suitable for development and densification, no significant increase in water demand is feasible in the future. Consequently, projects designed to increase water supply are presently not planned.

Table 4-11 (DWR Table 26) lists the future water supply projects.

Table 4-11 (DWR Table 26) Future water supply projects								
Project name ¹	Projected start date	Projected completion date	Potential project constraints ²	Normal-year supply ³	Single-dry year supply ³	Multiple-dry year first year supply ³	Multiple-dry year second year supply ³	Multiple-dry year third year supply ³
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total			0	0	0	0	0	0
<i>Units (circle one): acre-feet per year million gallons per year cubic feet per year</i> ¹ Water volumes presented here should be accounted for in Table 16. ² Indicate whether project is likely to happen and what constraints, if any, exist for project implementation. ³ Provide estimated supply benefits, if available.								